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DOI <https://doi.org/10.26661/2414-0287-2024-4-64-13>**CURRENT TRENDS IN THE DEVELOPMENT OF GLOBAL STOCK EXCHANGES****Bolduieva O.V., Kusakova Yu.O.***Zaporizhzhia National University**Ukraine, 69011, Zaporizhzhia, Universytetska str., 66**vlada.ox@ukr.net, kusakovay@gmail.com**ORCID: 0000-0001-5267-1816, 0000-0002-3827-6972***Key words:**

stock exchanges, financial infrastructure, capital mobilization, digitalization, blockchain, integration, globalization, competition, digital currencies.

The article is devoted to the analysis of the current state and transformation of stock exchanges as important institutions of the financial system, which play a key role in mobilizing capital, maintaining liquidity and ensuring transparency of financial markets. Stock exchanges are considered not only as platforms for trading financial instruments, but also as strategic instruments of economic development, ensuring fair pricing of assets and contributing to the formation of an investment climate. The paper details the main functions of stock exchanges, such as capital mobilization, resource allocation, liquidity support and protection of investor rights.

Particular attention is paid to the impact of digitalization on the activities of stock exchanges and the introduction of new technologies, such as blockchain, algorithmic trading, artificial intelligence and digital platforms. These technologies contribute to increasing the efficiency of stock exchange operations, create new opportunities for investors and companies, but at the same time require adaptation to new challenges, in particular those related to cybersecurity and regulatory restrictions. The paper also examines current trends in the development of stock exchanges in the context of sustainable finance, in particular the introduction of “green” bonds and ESG instruments.

Considerable attention is paid to the challenges facing stock exchanges in a globalized world. The issues of competition between international financial centers, increasing regulatory pressure, the impact of the Financial Transaction Tax (FTT) on market liquidity, as well as the challenges associated with the integration of national financial markets into the global ecosystem are considered. The role of integration processes that contribute to the creation of alliances between exchanges and the development of common platforms for trading, as well as their impact on increasing market transparency and liquidity, is described.

The results of the study have practical significance for regulators, financial institutions and investors seeking to adapt to the new conditions of the financial environment. The recommendations developed concern strategies for increasing the competitiveness of stock exchanges, expanding the toolkit for investors, improving regulatory policy and introducing sustainable financial instruments.

СУЧАСНІ ТЕНДЕНЦІЇ РОЗВИТКУ ГЛОБАЛЬНИХ ФОНДОВИХ БІРЖ**Болдуєва О.В., Кусакова Ю.О.***Запорізький національний університет**Україна, 69011, м. Запоріжжя, вул. Університетська, 66***Ключові слова:**

фондові біржі, фінансова інфраструктура, мобілізація капіталу, цифровізація, блокчейн, інтеграція, глобалізація, конкуренція, цифрові валюти.

Стаття присвячена дослідженню сучасного стану фондових бірж як ключових інституцій фінансової системи, що виконують функції мобілізації капіталу, підтримки ліквідності та забезпечення прозорості ринків. У роботі розглянуто основні функції фондових бірж, їхній вплив на економічний розвиток, а також значення у формуванні ринкової ціни активів. Автори аналізують впровадження новітніх технологій, таких як блокчейн, штучний інтелект та алгоритмічна торгівля, які змінюють структуру й принципи роботи бірж, створюючи нові можливості для інвесторів і бізнесу. Особливу увагу приділено викликам, що постають перед фондовими біржами, зокрема зростаючій конкуренції, регуляторним обмеженням та впливу

податку на фінансові транзакції (ФТТ). Розглянуто інтеграційні процеси на регіональних і глобальних ринках капіталу, розвиток сталого фінансування та перспективи інтеграції цифрових валют. Отримані результати мають практичне значення для оцінки трансформаційних процесів у діяльності бірж і формування стратегій їхнього подальшого розвитку.

General statement of the problem and its connection with important scientific or practical tasks

Stock exchanges are an integral part of the modern financial system, performing the functions of capital mobilization, maintaining liquidity and ensuring market transparency. In the context of globalization, increasing digitalization and increased competition between international financial centers, they are undergoing significant transformations, introducing innovative technologies and adapting to new challenges. Such changes not only create new opportunities for economic development, but also require the development of effective approaches to regulation, risk management and integration of national markets into the global financial ecosystem.

The importance of this issue is due to the need to adapt stock exchanges to modern economic conditions, which are characterized by rapid dynamics of change, the emergence of new financial products and platforms, the growing role of sustainable financing and tightening regulatory requirements. Research into the functioning of stock exchanges and their transformation is relevant both from a scientific point of view, as it contributes to understanding the patterns of development of financial markets, and from a practical point of view, as the results can be used to form strategies for effective management of financial infrastructure.

Analysis of recent research and publications

The topic of stock exchange development is studied by both Ukrainian and foreign scholars. Among Ukrainian authors, the following stand out: Rekunenko I.I. [7], who analyzes the impact of globalization on the functioning of stock exchanges, Styrsky M.V. [8], who studies the competitive strategies of Ukrainian stock exchanges, and Burmaka M. in co-authorship with Zinchenko F. [1], who highlight transformational processes in their activities. Also worthy of attention are the works of Kopylova O.V. [4] and Yursa M.Ya. [9], who study trends in the development of global stock exchanges and issues of corporate financing.

Among foreign researchers, the works of A. Demsetz on the efficiency of market structures, J. Coase on the analysis of transaction costs, G. Minsky on the study of financial stability, and R. Shiller, who studies the behavioral aspects of stock markets, are notable. The World Federation of Exchanges report focuses on the impact of financial transaction taxes (FTTs) and their implications for global markets.

These publications provide a basis for further analysis, but the issues of market integration and regulatory challenges remain relevant for modern research.

Statement of the objectives of the article (task statement)

The aim of the article is to analyze the current state and functions of stock exchanges, study their role in mobilizing capital, ensuring market transparency and supporting economic development, as well as identify key challenges and prospects for their transformation in the context of globalization, digitalization and increasing regulatory influence.

Presentation of the main material of the study

Stock exchanges are important institutions of the financial system, ensuring the efficient organization of securities trading, contributing to the mobilization of capital and the formation of asset prices. In a globalized world, they are becoming not only a platform for buying and selling securities, but also a strategic tool for economic development. Due to the growth of digitalization and integration of financial markets, stock exchanges are undergoing a significant transformation, introducing the latest technologies, such as blockchain, algorithmic trading and artificial intelligence. This creates new opportunities for investors and companies, but at the same time poses a number of challenges related to market volatility, cybersecurity and regulatory restrictions. In the context of globalization, stock exchanges also face growing competition, especially between international financial centers. This stimulates them to improve infrastructure, increase transparency and introduce innovative products. Of particular note is the impact of integration processes on regional and global capital markets, which creates new formats of cooperation between exchanges, in particular in the form of alliances and joint platforms.

Stock exchanges ensure the efficient organization of trading in financial instruments, contribute to the mobilization of capital and support the stability of financial markets. The main functions of stock exchanges can be divided into several main areas (table 1).

The functions considered demonstrate the importance of stock exchanges in ensuring the stability and efficiency of national financial markets. However, in the context of globalization, the role of stock exchanges goes beyond local markets, forming an interdependent global financial ecosystem.

In addition to general functions, an important aspect is the influence of the largest stock exchanges on the global economy, their market capitalization and development dynamics.

The largest stock exchanges in the world provide an effective mechanism for capital mobilization, promote economic development, form the investment climate and serve as an indicator of the general state of the economy (table 2).

The New York Stock Exchange is the largest in the world by market capitalization. It brings together companies from many industries, including technology, healthcare, and the financial sector. Giants such as Apple, Microsoft, and Amazon trade on the NYSE, which provides significant trading volume and global investor attention. The exchange serves as a hub for business investment and serves as a benchmark for other financial centers.

NASDAQ specializes in technology companies and is known for its high dynamism. Corporations such as Google, Meta, and Tesla are located here. A feature of NASDAQ is its electronic trading format, which allows for speed and accessibility of transactions for global investors. The exchange acts as a catalyst for the development of innovative industries.

As of March 2024, the New York Stock Exchange (NYSE) and Nasdaq remain the two largest stock exchanges in the United States with a total market capitalization of domestic listed companies of almost \$54 trillion. US. In particular, the capitalization of the NYSE was about \$ 28 trillion, while Nasdaq reached the mark of \$ 25 trillion.

Despite the fact that the NYSE retains a larger capitalization, Nasdaq shows a much faster growth rate. Since 2018, when the capitalization of Nasdaq was only \$ 11 trillion compared to 23 trillion for the NYSE, the technology

market, which is traditionally associated with Nasdaq, has become a key driver of this growth. The impact of the COVID-19 pandemic was particularly significant, stimulating demand for shares of information technology companies actively traded on Nasdaq [10].

Euronext is the largest stock exchange in Europe, uniting the markets of Amsterdam, Paris, Brussels, Lisbon, Oslo, Dublin and Milan. Founded in 2000, it has become an important element of the European financial infrastructure, offering a wide range of financial products and services. As of December 28, 2023, almost 1,900 issuers were listed on Euronext with a total market capitalization of €6.6 trillion.

Euronext provides an efficient mechanism for mobilizing capital for companies in various industries, offering platforms for initial public offerings (IPOs) and trading in other financial instruments such as bonds, derivatives, ETFs and indices. The merger of several national exchanges within Euronext has contributed to the creation of an integrated capital market, which increases liquidity and transparency.

The exchange is actively implementing the latest technologies to optimize trading, in particular automated trading systems and digital platforms. Euronext also plays a

Table 1 – Functions of stock exchanges [3]

Function	Characteristics
Capital mobilization	Providing conditions for companies to attract financing through IPOs, bond issuance and other instruments that contribute to business growth, reduce the cost of capital and expand economic opportunities for companies.
Liquidity support	Providing investors with the opportunity to quickly buy or sell financial instruments with minimal costs and risks, ensuring market continuity, price stability and predictability of financial transactions.
Market price formation	Ensuring fair determination of asset values through supply and demand mechanisms, taking into account real market conditions, which creates a basis for investment decisions and effective redistribution of resources.
Information transparency	The obligation of companies to disclose financial results, strategic plans, risks, environmental and social responsibility to increase investor confidence and ensure the stability of financial markets.
Capital allocation	Directing investments to the most promising and effective projects to support economic growth, develop innovative technologies, and promote structural changes in the economy.
Protecting investor rights	Regulating the activities of market participants, minimizing fraud, monitoring compliance with trading rules, introducing mechanisms for reviewing complaints and resolving conflicts between market participants to maintain trust in the exchange system.
Supporting economic growth	Attracting foreign investment, developing financial market infrastructure, supporting innovative development of economic sectors, and promoting integration into the global economic system through international cooperation of stock exchanges.

Table 2 – The largest stock exchanges in the world as of October 2023 [6]

Stock Exchange	Country	Market Capitalization (trillions of US dollars)
New York Stock Exchange (NYSE)	United States	25.0
Nasdaq	United States	21.7
Euronext	Netherlands	7.2
Shanghai Stock Exchange (SSE)	China	6.7
Japan Exchange Group (JPX)	Japan	5.9
Shenzhen Stock Exchange (SZSE)	China	4.5
Hong Kong Stock Exchange (HKEX)	Hong Kong	4.2
National Stock Exchange of India (NSE)	India	3.5
London Stock Exchange (LSE)	United Kingdom	3.4
Saudi Exchange	Saudi Arabia	3.1

leading role in sustainable finance, promoting the development of green bonds and supporting environmental initiatives.

Euronext is an example of the successful integration of European financial markets. In 2019, the exchange acquired Oslo Børs, expanding its presence in the Scandinavian market. In April 2021, Euronext completed the acquisition of Borsa Italiana, adding the Italian market to its network and strengthening its position as a leading player in Europe [12].

Through these integration steps, Euronext has strengthened its position as a leading player in the European capital market.

The Shanghai Stock Exchange is one of the largest stock exchanges in the world and an important element of China's financial system. The exchange is located in the country's economic center of Shanghai, which is known for its influence on global financial flows. As of 2023, the market capitalization of companies traded on the SSE exceeds \$6.7 trillion. United States, making it the third largest stock exchange in the world after the NYSE and Nasdaq.

The SSE operates as a trading platform for stocks, bonds, funds, and other financial instruments. It serves both state-owned enterprises and private companies, including China's largest corporations such as PetroChina, Industrial and Commercial Bank of China (ICBC), and Alibaba.[14]

The Japan Exchange Group is one of the world's leading stock exchanges and the second largest in Asia after the Shanghai Stock Exchange. As of 2023, the market capitalization of companies listed on the JPX was approximately US\$5.9 trillion. The JPX combines the Tokyo Stock Exchange (TSE), the Osaka Exchange (OSE), and the Tokyo Commodity Exchange (TOCOM), providing a wide range of financial products and services. JPX is one of the leaders in the implementation of environmentally sustainable financial instruments, including green bonds and ESG (environmental, social and corporate governance) indices [15].

JPX also promotes the use of financial technologies such as blockchain to increase trading transparency. Its platforms trade stocks of leading Japanese corporations such as Toyota, Sony, and Mitsubishi UFJ Financial Group, making JPX a key indicator of Japan's economic health and an important player in shaping the global investment climate [13].

Stock exchanges, while performing key functions of mobilizing capital, maintaining liquidity, and ensuring market transparency, face increasing challenges in the face of globalization and increasing regulatory pressure.

Innovative platforms such as Robinhood have made trading in financial instruments more accessible to a wide range of investors. They have opened up the possibility of trading without commissions and offered an easy-to-use interface. This has led to an increase in the number of retail investors, significant market volatility, and new challenges for traditional stock exchanges, which are forced to adapt their business models to the changed market structure.

Robinhood focuses on developing applications that allow customers to invest in a wide range of financial instruments, including stocks, exchange-traded funds

(ETFs), options, and cryptocurrencies. On the Robinhood platform, users can trade stocks listed on American stock exchanges, ETFs, options, American depositary receipts (ADRs), and cryptocurrencies through its subsidiary Robinhood Crypto, LLC (RHC) [5].

Stock exchanges face not only competition from innovative platforms such as Robinhood, but also challenges arising from regulatory changes. One such challenge is the financial transaction tax (FTT), which is seen in various countries as a mechanism to stabilize financial markets and increase government revenues.

However, this tax has a significant impact on the functioning of stock exchanges. In particular, it reduces trading volumes, liquidity, and the overall attractiveness of financial markets for investors. The FTT changes the economic conditions of exchanges, increasing transaction costs and thereby reducing the activity of market participants. This is especially noticeable in regions with a high tax burden, where exchanges risk losing their competitive positions.

At the international level, the introduction of the FTT stimulates the movement of capital to jurisdictions with more favorable trading conditions. This situation increases the need for global coordination of regulatory policies to maintain a balance between the stabilizing functions of taxes and maintaining market liquidity.

According to the 2024 World Federation of Exchanges report, the consequences of the FTT are significant: exchanges in regions with a high tax burden record a decrease in trading volumes and an increase in costs for market participants [11].

In today's conditions, the FTT is a challenge that requires a comprehensive approach to its solution, in particular, the development of policies that ensure both financial stability and the competitiveness of stock exchanges.

The introduction of modern technologies, the development of sustainable finance and the integration of financial markets are becoming priorities for exchanges, contributing to their transformation in response to increasing competition. However, these processes are accompanied by regulatory challenges, among which the Financial Transaction Tax (FTT) occupies a special place. While the FTT aims to stabilize markets and increase government revenues, its impact on trading volumes and liquidity creates additional risks for the competitiveness of exchanges.

A promising direction for stock exchanges is the integration of digital currencies, such as CBDCs (central bank digital currencies). The introduction of such instruments will speed up settlements and reduce transaction costs, making exchanges more attractive to investors.

In addition, the development of new markets, such as carbon trading, offers stock exchanges the opportunity to diversify their products and attract new market participants.

In today's world, stock exchanges remain important instruments of economic development, but their continued success depends on the ability to balance the needs of investors, regulatory requirements and the need to introduce innovations. Global policy coordination and the implementation of effective solutions in response to challenges will allow exchanges to maintain their relevance in the new economic environment.

Conclusions

Stock exchanges remain key elements of the global financial infrastructure, contributing to the mobilization of capital, maintaining liquidity and ensuring transparency of financial markets. In the context of globalization and digitalization, they act as a platform for the integration of financial markets and the introduction of new technologies, such as blockchain, artificial intelligence and algorithmic trading. Thanks to these transformations, exchanges not only ensure the efficient organization of trade, but also create favorable conditions for the development of innovative

industries and attracting investments, which makes them strategically important for economic growth. Along with new opportunities, stock exchanges face challenges, such as increasing competition, regulatory restrictions and the need to adapt to the changed market structure. The integration of digital currencies, the development of new financial products, such as “green” bonds, and the coordination of regulatory policies are promising directions for ensuring their competitiveness. The ability of stock exchanges to balance investor needs, regulatory requirements, and innovation will determine their role in shaping a sustainable financial ecosystem of the future.

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